What Is Claimed Is:

- A pressure sensor comprising:
 - a housing surrounding the pressure sensor;
- a sensor diaphragm for measuring pressure in at least one combustion chamber of an internal combustion engine, high pressure and temperature fluctuations occurring in the combustion chamber; and
- a heat shield composed of a heat-conducting material, the heat shield having orifices, the heat shield being situated upstream from the sensor diaphragm to dissipate heat to the housing surrounding the pressure sensor.
- 2. The pressure sensor according to claim 1, wherein the orifices in the heat shield have a desired cross-section.
- 3. The pressure sensor according to claim 1, wherein the orifices in the heat shield are designed as slits in a desired orientation.
- 4. The pressure sensor according to claim 3, wherein the slits have the form of at least one of (a) a polygon having at least three sides, the sides being one of straight and curved, and (b) an ellipsoid.
- 5. The pressure sensor according to claim 3, wherein the orifices, designed as slits, are situated in a star shape.
- 6. The pressure sensor according to claim 3, wherein the orifices, designed as slits, are situated tangentially.
- 7. The pressure sensor according to claim 1, wherein the orifices are bore holes.

- 8. The pressure sensor according to claim 1, further comprising an additional guard having a pressure measuring channel situated upstream from the heat shield.
- 9. The pressure sensor according to claim 1, wherein the heat shield is in contact with the sensor diaphragm.
- 10. The pressure sensor according to claim 1, wherein the heat shield is not in contact with the sensor diaphragm.
- 11. The pressure sensor according to claim 1, wherein the heat shield is composed of a material that is resistant to temperatures in the combustion chamber.
- 12. The pressure sensor according to claim 1, wherein the heat shield is composed of a good heat-conducting material.
- 13. The pressure sensor according to claim 1, wherein the pressure sensor is used in the combustion chamber of the internal combustion engine in a motor vehicle to reduce a thermal shock error.